Z77E-ITX

Intel® Z77 Chipset

ASRock
www.asrock.com

Compatible with Windows 7

Intel CHIPSET Z77 inside

Supports Intel inside CORE

555 XFast

Digi Power

mSATA Connector Onboard

VIRTU MVP Universal.GPU.Virtualization by Lucid

Intel® Smart Connect Technology

Intel® Rapid Start Technology

ASRock OMG

Internet Flash

SYSTEM BROWSER

Intel HD Graphics

SYSTEM BROWSER

Wi-Fi

WiFi 802.11 b/g/n

Product Brief

- Premium Gold Caps
- Digi Power Design, 6 + 2 Power Phase Design
- Supports Dual Channel DDR3 2800+(OC)
- 1 x PCIe 3.0 x16 Slot, 1 x mSATA Connector, 1 x mini PCIe Slot
- PCIE Gigabit LAN
- Supports Intel® HD Graphics with Built-in Visuals
- Multi-VGA Output options: DVI, HDMI, DisplayPort and D-Sub with the bundled DVI-to-D-Sub Converter
- 7.1 CH HD Audio with Content Protection (Realtek ALC898 Audio Codec), Supports THX TruStudio™
- Supports ASRock XFast RAM, XFast LAN, XFast USB, OMG, Internet Flash, UEFI System Browser
- Supports Intel Smart Connect, Intel Rapid Start, Lucid Virtu Universal MVP
- Free Bundle : 1 x ASRock WiFi Module, 1 x ASRock WiFi 2.4GHz Antenna, CyberLink MediaEspresso 6.5 Trial, ASRock MAGIX Multimedia Suite

Detail Specification

Platform	- Mini-ITX Form Factor: 6.7-in x 6.7-in, 17.0 cm x 17.0 cm - Premium Gold Capacitor design (100% Japan-made high-quality Conductive Polymer Capacitors)
CPU	- Supports 3rd and 2nd Generation Intel® Core™ i7 / i5 / i3 in LGA1155 Package - Digi Power Design - 6 + 2 Power Phase Design - Supports Intel® Turbo Boost 2.0 Technology - Supports Intel® K-Series unlocked CPU - Supports Hyper-Threading Technology
Chipset	- Intel® Z77 - Supports Intel® Rapid Start Technology and Smart Connect Technology
Memory	- Dual Channel DDR3 memory technology - 2 x DDR3 DIMM slots - Supports DDR3 2800+(OC)/2400(OC)/2133(OC)/1866(OC)/1600/1333/1066 non-ECC, un-buffered memory - Max. capacity of system memory: 16GB - Supports Intel® Extreme Memory Profile (XMP) 1.3 / 1.2
Expansion Slot	- 1 x PCI Express 3.0 x16 slot (PCIE1: x16 mode) * PCIE 3.0 is only supported with Intel® Ivy Bridge CPU. With Intel® Sandy Bridge CPU, it only supports PCIE 2.0. - 1 x mini-PCI Express slot: For WiFi module
Graphics	* Intel® HD Graphics Built-in Visuals and the VGA outputs can be supported only with processors which are GPU integrated. - Supports Intel® HD Graphics Built-in Visuals : Intel® Quick Sync Video 2.0, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 2500/4000 - Pixel Shader 5.0, DirectX 11 with Intel® Ivy Bridge CPU. Pixel Shader 4.1, DirectX 10.1 with Intel® Sandy Bridge CPU. - Max. shared memory 1760MB - Multi VGA Output options: DVI, HDMI, DisplayPort and D-Sub with the bundled DVI-to-D-Sub Converter - Supports HDMI 1.4a Technology with max. resolution up to 1920x1200 @ 60Hz - Supports DVI with max. resolution up to 1920x1200 @ 60Hz - Supports DisplayPort with max. resolution up to 2560x1600 @ 60Hz - Supports D-Sub with max. resolution up to 2048x1536 @ 75Hz - Supports Auto Lip Sync, Deep Color (12bpc), xvYCC and HBR (High Bit Rate Audio) with HDMI (Compliant HDMI monitor is required) - Supports HDCP function with DVI, HDMI and DisplayPort ports - Supports Full HD 1080p Blu-ray (BD) / HD-DVD playback with DVI, HDMI and DisplayPort ports
Audio	- 7.1 CH HD Audio with Content Protection (Realtek ALC898 Audio Codec) - Premium Blu-ray audio support - Supports THX TruStudio™
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Broadcom BCM57781 - Supports Wake-On-LAN - Supports Energy Efficient Ethernet 802.3az - Supports PXE
Wireless LAN	WiFi-802.11n module - 300Mbps IEEE 802.11n / 54Mbps IEEE 802.11g / 11Mbps IEEE 802.11b - Supports Station mode (Infrastructure mode and Ad-hoc mode)
Rear Panel I/O	I/O Panel - 2 x Antenna Ports - 1 x PS/2 Mouse/Keyboard Port - 1 x DVI-I Port - 1 x HDMI Port - 1 x DisplayPort - 1 x Optical SPDIF Out Port - 2 x Ready-to-Use USB 2.0 Ports - 1 x eSATA2 Connector - 4 x Ready-to-Use USB 3.0 Ports - 1 x RJ-45 LAN Ports with LED (ACT/LINK LED and SPEED LED) - 1 x Clear CMOS Switch with LED - HD Audio Jack: Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone
SATA3	- 2 x SATA3 6.0 Gb/s connectors, support RAID (RAID 0, RAID 1, RAID 5, RAID 10, Intel Rapid Storage and Intel Smart Response Technology), NCQ, AHCI and Hot Plug functions
USB 3.0	- 2 x Rear USB 3.0 ports by Intel® Z77, support USB 1.0/2.0/3.0 up to 5Gb/s - 2 x Rear USB 3.0 ports by ASMedia ASM1042, support USB 1.0/2.0/3.0 up to 5Gb/s - 1 x Front USB 3.0 header (supports 2 USB 3.0 ports) by Intel® Z77, supports USB 1.0/2.0/3.0 up to 5Gb/s
Connector	- 2 x SATA2 3.0 Gb/s connectors, support RAID (RAID 0, RAID 1, RAID 5, RAID 10, Intel Rapid Storage and Intel Smart Response Technology), NCQ, AHCI and Hot Plug functions - 1 x mSATA 3.0 Gb/s connector (Solid-State Drive connector), supports RAID (RAID 0, RAID 1, RAID 5, RAID 10, Intel Rapid Storage and Intel Smart Response Technology), NCQ, AHCI functions and Full-size mini-PCI Express modules - 2 x SATA3 6.0 Gb/s connectors - 1 x CIR header - CPU/Chassis FAN connector - 24 pin ATX power connector - 8 pin 12V power connector - Front panel audio connector - 2 x USB 2.0 headers (support 4 USB 2.0 ports) - 1 x USB 3.0 header (supports 2 USB 3.0 ports)
BIOS Feature	- 64Mb AMI UEFI Legal BIOS with GUI support - Supports "Plug and Play" - ACPI 1.1 Compliance Wake Up Events - Supports jumperfree - SMBIOS 2.3.1 Support - CPU Core, IGPU, DRAM, VCCSA Voltage Multi-adjustment
Support CD	- Drivers, Utilities, AntiVirus Software (Trial Version), CyberLink MediaEspresso 6.5 Trial, ASRock MAGIX Multimedia Suite - OEM
Unique Feature	- ASRock Extreme Tuning Utility (AXTU) - ASRock Instant Boot - ASRock Instant Flash - ASRock APP Charger - ASRock SmartView - ASRock XFast USB - ASRock XFast LAN - ASRock XFast RAM - ASRock Crashless BIOS - ASRock OMG (Online Management Guard) - ASRock Internet Flash - Lucid Virtu Universal MVP * Lucid Virtu Universal MVP can be supported only with processors which are GPU integrated. - Hybrid Booster: - CPU Frequency Stepless Control - ASRock U-COP - Boot Failure Guard (B.F.G.) - Good Night LED
Hardware Monitor	- CPU Temperature Sensing - Chassis Temperature Sensing - CPU Fan Tachometer - Chassis Fan Tachometer - CPU/Chassis Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature) - CPU/Chassis Fan Multi-Speed Control - Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore
OS	- Microsoft® Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit compliant
Certifications	- FCC, CE, WHQL - ErP/EuP Ready (ErP/EuP ready power supply is required)
Accessories	- Quick Installation Guide, Support CD, I/O Shield - 2 x SATA Data Cables (Optional) - 1 x ASRock WiFi 2.4GHz Antenna (Optional) - 1 x DVI-to-D-Sub Converter (Optional)

The specification is subject to change without notice. The brand and product names are trademarks of their respective companies. Any configuration other than original product specification is not guaranteed.

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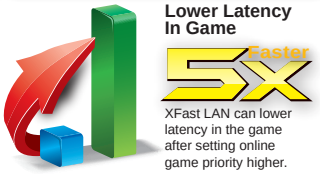
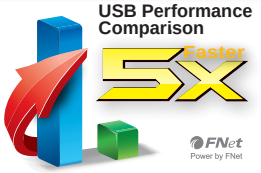
5X Faster for Photoshop Execution

XFast RAM will create a virtual disk from the system memory to boost the performance. For Photoshop, it can even perform 5X faster than before.



XFast LAN can lower latency in the game after setting online game priority higher.

Time latency in World of Warcraft: Cataclysm
*Lower is better
ASRock Motherboard with XFast LAN
Other Motherboard without XFast LAN



ATTO Disk Benchmark 4K Read
ASRock Motherboard with XFast USB
Other Motherboard without XFast USB

The performance boost percentage may vary with a different configuration.

Virtu Universal MVP - Uncompromised Game Response Performance

1. HyperFormance™ :

A new technology which combines integrated and discrete graphics for uncompromised performance and improves gaming frame rates 30-70%.

It's also supported with both ATI and NVIDIA graphics cards.

3. Switchable Graphics :

Dynamically assigns tasks to the best graphics resource regardless of physical cable connections.

2. Virtual Vsync :

A technology designed to solve the ever lasting debate between quality and performance. Bring GPU performance from 60 FPS Vsync limit back to its maximum while keeping Vsync image quality and no tearing.

Intel Smart Connect Technology

Intel Smart Connect Technology keeps content continuously updated while the PC is asleep! It will periodically wake up the PC while in a sleep state and check updates for things like email, Twitter, Facebook, etc.

Intel Rapid Start Technology

Quickly return to where you left off with a PC that goes from deep-sleep to full awake in a flash.

mSATA Connector Onboard

mSATA connector can be used to connect a Solid-State Drive (SSD) for an internal storage device. Coupled with SSD and HDD, users are able to take advantage of Intel Smart Response Technology and enjoy SSD caching performance.

WiFi 802.11 b/g/n Support

Selected ASRock motherboards come with an exclusive WiFi module that offers support for WiFi 802.11 b/g/n connectivity. WiFi module is an easy-to-use wireless local area network (WLAN) adapter to support WiFi function.

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Premium Gold Caps

Premium Gold Caps are 100% made in Japan; these solid capacitors are sleek, high gloss caps with a premium gold coating representing long life and stable performance.

Digi Power

By adopting digital Pulse-width modulation (PWM), the Z77 motherboard can provide CPU Vcore voltage more efficiently and smoothly.

ASRock OMG
(Online Management Guard)

Fast, Easy and Free – ASRock OMG technology allows you to establish an internet curfew or restrict internet access at specified times. Administrators are able to schedule the starting and ending hours of internet access granted to other users.

Internet Flash

Internet Flash searches for available UEFI firmware updates from ASRock servers. System can auto-detect the latest UEFI from our servers and flash them within UEFI setup without entering Windows ® OS.

Intel HD Graphics

Intel® HD Graphics, simplifies your designs by eliminating additional discrete graphics hardware, while integrating stunning visuals and performance for immersive gaming.

Next-Gen PCIe 3.0

- Higher bit rate - 8.0GT/s
- Higher bandwidth per lane - 1GB/s
- Higher efficiency - 98.5% encoding efficiency
- 100% backward compatible with previous PCI-E 2.0 / 1.0 standard

Note: Supported with 3rd Gen Intel Core Processor

UEFI System Browser

UEFI system browser is a useful tool included in graphical UEFI. It can detect the devices and configurations that users are currently using in their PC.

THX TruStudio

Delivering the fullest audio experience for games, music and movies.

AXTU

ASRock Extreme Tuning Utility (AXTU) is an all-in-one software to fine-tune different features in an userfriendly interface, which includes Hardware Monitor, Fan Control, Overclocking, OC DNA, IES and XFast RAM.

Cyberlink MediaEspresso 6.5 Trial

The fastest video media conversation software

MAGIX Multimedia Suite

The ultimate solutions to enhance your media experience. From music management, music creation, video editing to photo management. Simply do more with your media than you ever thought possible.